

Vaisala X-band Weather Radar



Vaisala helps customers establish weather observation networks and build up capabilities that improve their capacity to assess, predict, and prepare for extreme weather. In addition, we support the scientific community in its efforts to increase knowledge of our changing climate and its impacts by enabling the most accurate observations of the world.

The new X-band Weather Radar provides highly accurate measurements for a limited area, filling in a gap in a national radar network or delivering precise information for an airport. Severe weather in mountainous areas and gaps under sparse weather radar networks will now be visible when X-band radars are added to the weather radar networks. Airport safety and efficiency will be improved with accurate detection and nowcasting of hazardous conditions.

A Better Way to Measure

Leveraging dual-polarization performance designed to deliver exceptional accuracy, the X-band Weather Radar delivers clean data to increase safety and improve operational efficiency. X-band utilizes simple site selection, automatic and continuous calibration, easy installation and integration into existing networks, a simplified signal path and new measurement methods to make this technology industry leading. Remote operation and diagnostics reduce the need for site visits and empower decision-makers with high data quality and availability, as well as improved sensitivity.

Key Benefits

- **Cost Efficient** — From delivery to management and through the end of life, the X-band Weather Radar's easy installation and calibration ensures no surprises and low lifetime cost.
- **High Data Quality and Availability** — By filling gaps in radar networks, the X-band Weather Radar delivers improved radar network coverage and higher radar data resolution (e.g. at low altitudes, in mountainous areas, and around wind parks).
- **Ease of Installation** — Easy plug-and-play installation and integration to radar network can be completed within a week.
- **Outstanding Performance** — X-band frequency delivers more accurate and comprehensive measurement data with higher resolution and better precision for short-range meteorological surveillance.

Fill Gaps and Improve Existing Radar Networks



Receive comprehensive coverage with fully integrated and optimized radar networks using both X- and C-band radars. X-band radar helps fill gaps in radar coverage; especially in mountainous terrain, low altitudes, and wind farms.

With industry-leading data processing and hardware design, Vaisala X-band Weather Radar provides meteorological data to increase safety and improve operational efficiency. The radar is designed with the most sensitivity to deliver exceptional accuracy for short-range meteorological surveillance at optimized life cycle cost.

The Vaisala X-band Weather Radar enhances data quality in strategic locations and delivers information at a higher resolution and with better precision. The intelligence provided by the unique sensitivity of the new radar will complement systems run by weather services, airports, and even maritime organizations who monitor conditions to protect life and property. The affordable, networked solution is fully compatible with existing weather radar systems like the C-band radar, to strengthen weather intelligence for your operations.

User-Friendly System Design

- **Compact and Transportable** — With most equipment in the radome, the small size, smaller environmental impact, and ease of installation on existing buildings allow for more freedom in site selection.
- **Modular Design** — Allows for additional modules and higher transmitted power.
- **Streamlined Standard Manufacturing and Delivery** — With no change in familiar work environment or tools, on-site work is minimized.
- **Reliable in Any Environment** — From temperature and humidity to high altitudes, structural icing, dust, wind, power outages, and more, the X-band Weather Radar enables 24/7 operation in even the most demanding applications.
- **Ease of Integration** — Specifically designed to seamlessly integrate with Vaisala IRIS Weather Radar Software.

VAISALA

www.vaisala.com/X-band

Ref. B211812EN-A ©Vaisala 2019

This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications — technical included — are subject to change without notice.